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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,366	12/17/2003	Frank Akselberg	MRKS/0132	8553

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EXAMINER

SMITH, MATTHEW J

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/738,366

Applicant(s)

AKSELBERG, FRANK

Examiner

Matthew J. Smith

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 18Jun04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Upchurch (4796699).

Upchurch discloses a method of controlling a downhole hydraulic sequential control system in which a plurality of pressure relief valves 44, 53, 65, 76 are arranged to open sequentially by introduction of a hydraulic fluid (col. 13, lines 26-34), the method comprising transmitting the pressure of downhole working fluid to the hydraulic fluid of the control system (col. 12, lines 53-54); the pressure relief valves provide flow directly or indirectly to corresponding actuators 23; the pressure of the hydraulic fluid is controlled through regulating the flow rate of the working fluid (col. 12, line 33), by draining, into chamber 57, the working fluid through a throttle valve 68 with flow dependent flow resistance; and the pressure from the working fluid is transmitted to the hydraulic fluid by means of a dividing piston 150. The reference also discloses a device for regulating a downhole hydraulic sequential the device comprising a dividing piston 150 arranged to be influenced by the pressure of downhole working fluid and transmit pressure to the hydraulic fluid of the sequential control system; a throttle valve 20 communicatively connected to a working fluid chamber by the dividing piston; and the pressure of the hydraulic fluid is the same as the pressure of the working fluid (col. 13, line 34).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Upchurch in view of Kilgore (6651749).

Upchurch discloses sequentially operated valve system to actuate a tool but not an area of the dividing piston acted on by the working fluid larger than the area of the piston acting on the hydraulic fluid so that the pressure of the hydraulic fluid is higher than the pressure of the working fluid, the pressure from the working fluid transmitted to the hydraulic fluid by means of a booster; the dividing piston forms part of a booster, or the area of the dividing piston acted on by the working fluid is greater than the area of the dividing piston acting on the hydraulic fluid.

Kilgore presents an area of the dividing piston 10 acted on by the working fluid larger than the area of the piston acting on the hydraulic fluid so that the pressure of the hydraulic fluid is higher than the pressure of the working fluid, the pressure from the working fluid transmitted to the hydraulic fluid by means of a booster (fig. 1); the dividing piston forms part of a booster, and the area of the dividing piston acted on by the working fluid is greater than the area of the dividing piston acting on the hydraulic fluid.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a booster, as presented by Kilgore, in the Upchurch system in order to increase pressure sufficient to operate a downhole device without the necessity of increasing tubing pressure (Kilgore, col. 1, line 50-53).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schultz et al. (5101907) show a valved actuating system utilizing differential pressure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 571-272-7034. The examiner can normally be reached on T-F, 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell
Supervisory Patent Examiner
Art Unit 3672

MJS *MJS*
1 September 2005